

*Report of the New York Eye Infirmary for May and June, 1859.*

By F. J. BUMSTEAD, M.D., Assistant Surgeon. *With Remarks upon two cases of Cataract.* By C. R. AGNEW, M.D., Surgeon to the Infirmary.

## DISEASES OF THE EYE.

Injuries of the Lids.....	6	Sclerotitis .....	7
Inflammation and Abscess of the Lids .....	1	Iritis .....	14
Tumors of the Lids.....	11	“ syphilitic.....	7
Nævus .....	1	Synechia .....	2
Entropion and Ectropion .....	7	Atresia Iridis .....	1
Trichiasis.....	2	Cataract .....	19
Diseases of the Lachrymal Passages	25	“ traumatic.....	4
Tinea and Lippitudo.. ..	58	“ congenital.....	3
Hordeolum.....	8	Choroiditis and Retinitis.....	11
Conjunctivitis simple.....	138	Ophthalmia interna.....	6
“ catarrhal.....	12	Amaurosis .....	24
“ gonorrhœal.....	1	Asthenopia .....	7
“ purulent.....	4	Ptosis .....	2
“ neonatorum .....	5	Blepharospasm .....	1
“ phlyctenular.....	120	Strabismus .....	14
“ granular.....	84	Paralysis of External Rectus.....	1
Pterygium.....	4	“ Motor Oculi.....	1
Keratitis.....	31	Injuries of Globe.....	25
Ulcer of the Cornea.....	38	Microphthalmos .....	1
Opacity “ “ .....	31	Sunken Globe.....	2
Slough “ “ .....	4		770
Staphyloma.....	13	Diseases of the Ear.....	36
Foreign particles.....	10		
Kerato-Iritis.....	2	Total.....	806
Hypopion .....	2		

*Operations.*—For tarsal tumor, 4; for entropion, 2; on lachrymal passages, 4 (two by Bowman’s method, one obliteration of lachrymal sac by nitric acid, and one by the actual cautery); for strabismus, 5; for pterygium, 1; removal of superficial opacity of the cornea, 2; excision of the globe, 11; for cataract, 19 (seventeen by keratonyxis, one by reclination, and one by extraction). Total, 48.

*Lens dislocated beneath the conjunctiva.*—A case of this kind was given in a former report, in the May number of this Journal, in which it was stated that the dislocated lens was extracted by Dr. Hinton, “not with the hope of restoring vision, which was irretrievably lost in consequence of the blow which produced the dislocation, but to remove the source of irritation produced by the friction of the lids against the tumor.” This patient has recently returned to the Infirmary, and it is worthy of notice, that, contrary to our expectation, his vision is remarkably good. The opposite eye was destroyed some years ago, and with its fellow, the subject of the recent dislocation of the lens, he can find his way about, and, with cataract glasses, is

even able to read fine type. In short, his sight is as good as after a successful operation of extraction, by corneal section.

*Excision of the globe.*—The reader will be struck with the frequency with which this operation has been performed during the last two months, in comparison with the whole number of operations. Several of the cases, however, were sent to the Infirmary from a distance, by the attending physicians, who had exhausted all their powers in the vain attempt to permanently subdue the inflammation of the disorganized eye, which constantly recurred, and under which the opposite eye was suffering through sympathy. The following are a few of these cases:

*Case 1.*—Uriah Griffin, aged 40. General enlargement of eye-ball, with two staphylomata of the choroid, originating in an injury, followed by inflammation seven years ago, and much aggravated by a blow from a child's head five months ago. The excision was somewhat difficult, owing to the size of the globe. On opening the ball after removal, the vitreous was found to be replaced by a bloody fluid, and between the choroid and sclerotic were several circumscribed clots. These hemorrhagic appearances, no doubt, date back to the blow from the child's head, following which there was a rapid enlargement of the ball. Artificial eye inserted on the fifth day.

*Case 2.*—Patient states that the sight of one eye was impaired seven years ago, by the small pox. Three months ago, the same eye was injured by a fragment of iron, which made a small wound in the cornea, resulting in synechia and general ophthalmia. The lens soon became cataractous, and the globe atrophied. The eye is now in a state of chronic inflammation, which prevents any employment, since every attempt at labor produces an exacerbation. Entire relief followed excision.

*Case 3.*—Eye sunken in consequence of injury. Opposite eye repeatedly affected through sympathy. Excision. The vitreous found to be replaced by a hard and firm clot.

*Case 4.*—Patient a girl, aged 17. Right eye staphylomatous, ulcerated, and the seat of general inflammation. Excision. Artificial eye inserted on the fifth day.

Another case of excision is given in detail in the following remarks, by Dr. Agnew.

*Remarks upon two cases of cataract.*—The question as to what becomes of the crystalline lens after a successful depression, has been answered since our last report, by a case in the service of Dr. Buck, at the Infirmary, and one in my private practice.



The former was that of a man advanced in life, who had had his right lens depressed nine years previously.

Very little inflammation had followed the operation, and he enjoyed good sight for nearly nine years. A few days before his admission to the Infirmary, after stooping and again assuming the direct posture, his sight became almost entirely obstructed, by what proved to be the remains of the lens in the anterior chamber. The fellow eye was rendered useless by cataract.

The dislocated lens was about one-third the normal size, of a dark amber color and preserving a smoothness of outline, and was so placed as to obstruct the passage of light through about two-thirds of the pupil. Although it had not yet produced any inflammation, it was deemed unsafe either to restore it behind the iris or leave it in the anterior chamber, and Dr. B. accordingly recommended its removal through section of the cornea.

It may be well to consider the question, as to what becomes of the crystalline lens after depression, in the light of such a case as the above, and as illustrated by what follows.

Does it ever become entirely dissolved? I presume it never does, when its nucleus is so hard as to escape fracture under the pressure of the cataract needle. And even when the lens does break up, the fragments disappear slowly, and some of them probably always remain undissolved. I have on several occasions during the last two years enjoyed the opportunity of studying the condition of a displaced crystalline lens in eyes after extirpation. In one case, of great interest, the lens had become dislocated spontaneously, after long continued cataract, so that its upper edge was barely perceptible above the lower segment of the pupil. In this situation it had given rise to constant irritation, and been instrumental in causing loss of vision. I at first endeavored, by introducing a needle posterior to the iris, to lift the lens through the pupil, with the view of removing it from the anterior chamber by corneal section. Failing in that, however, I at once extirpated the eye, and obtained an explanation of the reason why my needle had not been able to dislodge the lens. The latter was bound down to the posterior surface of the iris and anterior portion of the choroid by a delicate interlacement of whitish bands, resembling false membrane. I was disposed to regard some of this cordage as formed by the remains of the suspensory ligament of the lens. The lens, though very opaque, was not calcified, and what remained of its anterior capsule was much thickened by a deposition of lymph. The anterior portion of the vitreous humor, much toughened, was traversed by several finely drawn,

whitish filaments, and the choroid and retina both showed the lesions of acute adhesive inflammation.

In three instances, where the removal of the eye had been rendered necessary by incurable internal ophthalmia, I have found the displaced lens calcified and loosely attached to the iris and ciliary body, but in no instance reduced to more than one-third or one-fourth its normal size.

On the 26th of May, I operated by extraction upon the left eye of Mr. C., aged 79, and removed a very hard lens without accident. He had had his first symptoms of cataract in the right eye thirteen years previously, and nearly twelve years before had had the left lens so successfully depressed, that he was again enabled not only to follow the ordinary avocations of a farmer, but to read. Such use of the eye he enjoyed, with only occasional sensations of fatigue and eye-pain, for eleven years, until one day in the hay-field his eye inflamed and his sight soon went out. When I first saw him he had been blind in the eye which had been operated upon nearly a year, and in its fellow about twelve years from undisturbed cataract. The eye upon which depression had been practised was inflamed, particularly its lower aspect; its iris was of a dirty green color, and the pupil fixed, irregular and hazy. The fellow-eye showed an amber-colored cataract, a sluggish, though regular pupil, and rather more than the usual amount of senile congestion, but had a good perception of light. I was disinclined to operate upon the last-mentioned eye, for fear of deriving a fatal irritation from the other organ, but yielded to the repeated solicitations of the patient, and did extract an exceedingly hard, shrunken lens, without any other extraordinary occurrence than the escape of a milky fluid on lacerating the capsule. This fluid, derived no doubt from the softening and disintegration of the peripheral portion of the lens, was a source of embarrassment, until it had leaked out from the corneal wound and clarified the anterior chamber. The pupil being central and the wound in nice coaptation, I closed both eyes gently with isinglass plaster, and awaited an indication. On account of general debility, a moderate amount of stimulus, with beef tea and quinine, were allowed from the start. The case progressed kindly, and on the fifth day, the plasters having been removed, the corneal wound had so far healed as to hold the aqueous humor. The pupil was central, somewhat irregular and fixed. The other eye, whose association I had always dreaded, was in a very ugly state—intensely injected, painful and tender. Moderate leeching, however, warm anodyne collyria, atropine and counter-irritation, reduced the inflammation to such an extent that the other eye was much relieved. It was very



interesting to observe how the amelioration of the eye operated upon kept pace with the favorable changes in the organ suffering from the secondary inflammation. This improvement in the eye operated upon has gone on, until the old gentleman is now able to read print with every facility. The fellow organ remains sightless and congested, and I have no doubt that the nucleus of the depressed lens still exists in it, furnishing the nidus of irritative inflammation whenever an additional morbid impression evokes its power. If my patient does not retain his sight, the bad associate must be extirpated.

These two cases furnish a very interesting theme. In one of them, sight remained for eleven years after depression of the cataract, and was then lost, the eye meanwhile having given occasional external evidence of internal irritation. In the other, sight was good for nine years, and then put in peril by the evolutions of an undissolved lens nucleus. I suppose that in the latter case the lens had been either mechanically involved in the depth of the vitreous humor, or else slightly held by delicate filaments similar to those alluded to in the case of extirpation. These membranous threads, like the adhesions of pleurisy, if you please, had slowly given way under the nutritive changes of the cavity of the eyeball, and allowed the incarcerated lens to escape. I am free to confess, that if the rejection of the operation of depression depended upon such evidence, it would be difficult to convince all of the comparative advantages of extraction; but fortunately for the progress of ophthalmic science, the experience against allowing the hard lens to remain in the eye is mainly made up by the disastrous consequences immediately following the operation. And we must not be disturbed in our convictions by the alleged experience of those surgeons who have operated so frequently by depression and do not remember ever to have failed in restoring a delightful amount of vision! Some day, the comparative advantages of extraction over depression will be proved by indisputable statistics, and all will join those high authorities in the old world, who characterize the attempts to cure hard cataract, by any operation having for its object the mere dislocation of the lens, as "disastrous and unscientific."

